UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/478,142	11/18/2003	Tim Fingscheidt	03869.105839	7103
King & Spalding LLP 401 Congress Avenue			EXAMINER	
			YEN, ERIC L	
Suite 3200 Austin, TX 787	01		ART UNIT	PAPER NUMBER
			2658	
			NOTIFICATION DATE	DELIVERY MODE
			10/22/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

AustinUSPTO@kslaw.com AustinIP@kslaw.com emitchell@kslaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TIM FINGSCHEIDT, HERVE TADDEI, and IMRE VARGA

Appeal 2011-005798 Application 10/478,142 Technology Center 2600

Before DEBRA K. STEPHENS, BRUCE R. WINSOR, and JON B. TORNQUIST, *Administrative Patent Judges*.

TORNQUIST, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134(a) from a non-final rejection of claims 8, 12, and 14-17. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM

Introduction

According to Appellants, the present invention relates to a method for encoding voice signals, especially so-called voice onset sections. Abstract.

Exemplary Claim

Claim 8, reproduced below, is illustrative of the claimed subject matter. Claim language relevant to this appeal is italicized:

8. A method for encoding a voice signal, the method comprising the steps of:

dividing up the voice signal into voice signal sections; comparing the divided up voice signal with a voice signal synthesized via an excitation signal of a synthesis filter, wherein provided that the excitation signal for the synthesis filter be put together at least via an entry from a fixed code book and a second amplification factor assigned to the fixed code book, and via an entry from an adaptive code book and a first amplification factor associated with the adaptive code book;

classifying the voice signal sections in terms of specific speech characteristics via a signal classifier; and

specifying a value of the first amplification factor as a function of the signal classifier while a fixed amount of data is reserved for a voice signal section,

wherein an amount of data required to represent the adaptive code book entry and the first amplification factor is reduced, and due to the reduction, at least one other parameter that occurs during the voice encoding takes up a greater portion

of the fixed amount of data, at least one of the adaptive code book entry and the first amplification factor is not transmitted; scalar quantizing the second amplification factor depending at least on the signal classifier; and wherein specifying a value of the first amplification factor comprises fixing the first amplification factor to substantially zero.

REFERENCES

Gerson	U.S. 5,657,418	Aug. 12, 1997
Ekudden	U.S. 6,192,335 B1	Feb. 20, 2001
Gao	U.S. 6,574,593 B1	June 3, 2003

REJECTIONS

Claims 8, 12, and 14-17 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Gao, Ekudden and Gerson. Ans. 3.

GROUPING OF CLAIMS

Based on Appellants' arguments, we select representative claim 8 to decide this appeal. *See* Br. 3-8.

We have only considered those arguments that Appellants actually raised in the Briefs. Arguments Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2011).

ISSUE

35 U.S.C. § 103(a): Claims 8, 12, and 14-17

Appellants contend that one of skill in the art "would not combine *Ekudden* with *Gerson* and/or *Gao* because *Ekudden* teaches away from the multi-mode coding techniques employed in *Gerson* and *Gao*." Br. 4.

According to Appellants, "the addition of *Ekudden's* small coding gain to the *Gao/Gerson* coding scheme results in a multi-modal system – the very type of system that *Ekudden* teaches away from." Br. 6.

Appellants also argue that the art cited by the Examiner does not teach the claim limitations "specifying a value of the first amplification factor as a function of the signal classifier," as recited in claim 8. Br. 8.

Issues

- (1) Does Ekudden teach away from all multi-modal systems such that one of skill in the art would not combine Ekudden's small gain speech-onset function with the specific multi-modal coding systems of Gerson or Gao?
- (2) Does the art cited by the Examiner disclose the limitations "specifying a value of the first amplification factor as a function of the signal classifier," as recited in claim 8?

ANALYSIS

Issue 1:

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2006) (citations and internal quotation marks omitted). The degree of teaching away depends on the particular facts of each case. *See In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). A particular course of action "often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine." *Medichem, S.A. v. Rolabo, S.L.*,

437 F.3d 1157, 1165 (Fed. Cir. 2006); *Gurley*, 27 F.3d at 553 ("A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use.")

We are not persuaded by Appellants' argument that Ekudden teaches away from using *any* type of multi-modal coding. Ekudden does describe certain advantages and "disadvantages" of a particular implementation of multi-modal coding using waveform and energy matching, in particular at bit rates below 8 kb/s. *See* Ekudden, col. 2, ll. 6-15, 44-59. This does not, however, rise to the level of teaching away for all implementations of multi-modal coding.

Appellants classify the systems of Gao and Gerson as multi-modal, but do not specify what modes these systems use or indicate how the modes are implemented. Br. 6-7. Further, Appellants provide no specific evidence showing why the disadvantages related to waveform and energy matching described in Ekudden would dissuade one of skill in the art from combining Ekudden's small-gain speech onset function with the specific coding systems of Gao or Gerson.

Moreover, Appellants seem to be arguing Ekudden's system as a whole would not be incorporated into the systems of Gerson or Gao by one of skill in the art. However, the Examiner relies on Ekudden for the specific teaching of "fixing the first amplification factor to substantially zero," and not to combine the entire Ekudden system with either Gerson or Gao. Ans.

6. Thus, Appellants do not directly address the specific teaching and combination as asserted by the Examiner.

Based on the foregoing, we find Appellants have not provided sufficient evidence or argument to support a conclusion that Ekudden teaches away from all multi-modal systems or that one of skill in the art would be dissuaded from combining the small coding gain of Ekudden with the particular systems of Gao or Gerson.

Issue 2:

Appellants argue that the claim terms "specifying a value of the first amplification factor as a function of the signal classifier" are not found in the art cited by the Examiner. Br. 8.

The Examiner asserts, citing to specific figures and disclosures in the specification, that Gao teaches classifying a frame as Type One or Type Zero and that this classification is "solely for the purpose of deciding which gains/amplification-factors are derived/specified for the input." Ans. 19. Appellants respond that characterization of classes as either Type One or Type Zero "has nothing to do with" the first amplification factor. Br. 8.

The Examiner pointed to significant portions of the Gao reference and provided detailed reasoning to support the rejection. Ans. 19. Appellants have not identified sufficient evidence or provided sufficient argument to persuade us of Examiner error. Therefore, we find the Examiner did not err in determining the Gao reference discloses the claim limitations "specifying a value of the first amplification factor as a function of the signal classifier," as recited in claim 8.

DECISION

For the reasons set forth above, the Examiner's rejection of claims 8, 12, and 14-17, under 35 U.S.C. § 103(a) as being unpatentable over Gerson, Gao and Ekudden is affirmed.

Appeal 2011-005798 Application 10/478,142

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

<u>AFFIRMED</u>

kis